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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,290	11/26/2001	Miguel Estevez	450117-03705	8995
20999	7590	10/01/2004		
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER KASSA, YOSEF	
			ART UNIT 2625	PAPER NUMBER 9
DATE MAILED: 10/01/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/995,290

Applicant(s)

ESTEVEZ ET AL.

Examiner

YOSEF KASSA

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### ***Specification Objection***

1. The abstract of the disclosure is objected to because the abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. Correction is required. See MPEP § 608.01(b).
2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a

nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 10, 13, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheung et al (U.S. Patent 6,178,205).

With regarding to claim 1, Cheung et al disclose method to reduce coding artifacts within a discrete decoded picture, i.e., 8x8 blocks, (see col. 4, lines 50-62), characterized by a spatial and/or temporal filtering (see Fig. 1, items 140 and 130) with respective filter characteristics dependent on an image quality value (Q), (refer to MQANT value on table 1, in col. 5, the filtering process depends on MQANT value).

With regarding to claim 2, Cheung et al disclose characterized in that said spatial filtering includes a deblocking filtering, i.e., block boundary filter, Fig. 1, item 120, the process of filtering the block value which reads on the term deblocking, wherein the deblocking filter operation decreases with an increasing image quality value (Q) (see table 1 in col. 5, that is. when the block boundary value decreases the quality

increases).

With regarding to claim 3, Cheung et al disclose characterized in that said deblocking filtering chooses an activity-dependent weighting function for a pixel to be filtered according to a image quality value (Q) (see col. 6, lines 45-54), wherein the activity of both blocks to which common border said pixel belongs is considered (see col. 6, lines 62-col. 6, line 7).

With regarding to claim 4, Cheung et al disclose characterized in that said weighting function is only applied to said pixel to be filtered if a blocking artifact is detected (see col. 6, lines 45-54).

With regarding to claim 5, Cheung et al disclose characterized in that said deblocking filtering is performed separately for horizontal and vertical borders of neighboring blocks (see table 1 of col. 5, lines 15-25).

With regarding to claim 10, Cheung et al disclose the temporal filter operation decreases with an increasing image quality value (see col. 7, lines 24-31 and also see table 2 of col. 7).

With regarding to claim 13, Cheung et al disclose image quality value is determined based on a quantization scaling factor used for encoding the picture (see col. 11, lines 10-15).

With regarding to claim 15, Cheung et al disclose discrete encoding/decoding of the picture is based on a discrete cosine transform (see col. 4, lines 31-45).

With regarding to claim 16, Cheung et al disclose discrete encoding/decoding of the picture is based on a MPEG coding scheme (see col. 3, lines 57-61).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cheung et al (U.S. Patent 6,178,205), and further in view of Hu et al (U.S. Patent 6,668,097).

With regarding to claim 6, while Cheung et al disclose spatial filtering process, he is silent about deringing filtering, wherein the deringing filter operation decreases with an increasing image quality value (Q). However, in the same field of endeavor, Hu et al discloses this feature, that is, filtering ringing artifact which reads on the term deringing (see col. 2, lines 19-23). At the time or the invention, it would have been obvious to incorporate the teaching of Hu et al reducing ringing artifacts process into Cheung et al system. The motivation for doing so is to provide decompressed image filtering to reduce ringing artifacts.

With regarding to claim 7, Cheung et al is silent about deringing filtering chooses a image quality value (Q) dependent deringing mask for a pixel to be filtered. However, in the same field of endeavor, Hu et al discloses this feature (see col. 4, lines 30-38). At the time or the invention, it would have been obvious to incorporate the teaching of Hu et al image masking process into Cheung et al system. The motivation for doing so is to

provide masking portion of an image to filter ringing artifact from the image.

Claim 8 is similarly analyzed as claim 7.

With regarding to claim 9, Cheung et al is silent about deringing filtering is a two dimensional filtering taking only neighboring pixels of pixel to be filtered into account which belong to a same region. However, in the same field of endeavor, Hu et al discloses this feature (see col. 2, lines 13-24). At the time or the invention, it would have been obvious to incorporate the teaching of Hu et al reducing ringing artifacts process into Cheung et al system. The motivation for doing so is to provide decompressed image filtering to reduce ringing artifacts form the image.

With regarding to claim 14, Cheung et al is silent about image quality value (Q) is determined based on a user selection. However, in the same field of endeavor, Hu et al discloses this feature (see col. 4, lines 54-58). At the time or the invention, it would have been obvious to incorporate the teaching of Hu et al user input process into Cheung et al system. The motivation for doing so is to provide user input for filter ringing artifact from the image.

#### ***Allowable Subject Matter***

5. Claims 11 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Other Prior Art Cited***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. (6,281,942) to Wang discloses spatial and temporal filtering mechanism for digital, motion video signals.

US Patent No. (35,414) to Murakami et al discloses picture coding and decoding apparatus using vector quantization.

US Patent No. (5,367,629) to Chu et al discloses digital video compression system...

US Patent No. (5,764,307) to Ozcelik et al discloses method and apparatus for spatially adaptive filtering for video encoding.

US Patent No. (5,920,356) to Kobayashi et al discloses picture signal processing method and apparatus.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSEF KASSA whose telephone number is (703) 306-5918. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BHAVESH MEHTA can be reached on (703) 308-5246. The fax phone numbers for the organization where this application or proceeding is assigned is (703)



Art Unit: 2625

872-9306 for regular communication and (703) 872-9306 for after Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (703) 306-5631. The group receptionist number for TC 2600 is (703) 305-4700.

**PATENT EXAMINER**

Yosef Kassa

09/29/04.

A handwritten signature in black ink, appearing to read 'Yosef Kassa', written over a horizontal line.